

From: [McMillan, Teresa](#)
To: [Coltrain, Katrina](#)
Cc: cradu@eaest.com; lvega_eaest.com; [Turner, Philip](#); [Barry Forsythe](#); [Todd Downham](#)
Subject: FW: Analysis Summary
Date: Friday, June 10, 2016 8:26:15 AM

Katrina,

Below are EA's thoughts on the Analysis Summary.

Thanks,

Teri McMillan, PG
EA Engineering, Science, and Technology, Inc., PBC
320 Gold Ave SW, Suite 1300
Albuquerque, New Mexico 87102
(505) 715-4332

From: Radu, Cristina
Sent: Friday, June 10, 2016 7:03 AM
To: Vega, Luis <lvega@eaest.com>
Cc: McMillan, Teresa <tmcmillan@eaest.com>
Subject: Re: Analysis Summary

Field parameters for GW and SW also include dissolved oxygen and oxidation-reduction potential

Cristina Radu
Cell: 505/681.6894

On Jun 8, 2016, at 10:56 AM, Vega, Luis <lvega@eaest.com> wrote:

My input in red text below. Additionally, with respect to hexavalent chromium, the 1923 Sanborn map also shows a cooling tower located in the northern sector of the Wilcox process area (just east of Tanks 18-19). We should keep it as an analyte in GW (focus on process area wells only) and soil (focus on soils in the vicinity of former cooling towers). The issue with analysis of water for Cr+6 is the short 24-hr holding time (we'll likely bust the holding time unless we locate a local lab say in Tulsa).

Luis Vega
EA Engineering, Science, and Technology, Inc., PBC
Cell: 214-280-9031

From: Coltrain, Katrina [<mailto:coltrain.katrina@epa.gov>]
Sent: Wednesday, June 08, 2016 8:14 AM
To: McMillan, Teresa; Radu, Cristina; Vega, Luis; Turner, Philip; barry_forsythe@fws.gov; Todd Downham
Subject: Analysis Summary

All, I just want to make sure that I understand the parameter list. I have looked at so many comments and recall so many conversations that I am just going around

in circles.

Thank you for your patience as I work through this.

Ground water

- organic analytes: TCL VOCs, TAL SVOCs including SIM for PAHs
- inorganic analytes: metals total, including mercury, cyanide, and hexavalent chromium
- Field parameters: pH, turbidity, temperature, and conductivity
- NO PCBs/Dioxins/Furans/Pesticides: these are not expected to be site COC. Risk is that we may have to resample if they are found to be a site COC.

GW question: Can hexavalent chromium be eliminated based on same rationale as PCBs/Dioxins/Furans/Pesticides? If it is included, Houston can perform the analyses.

We can limit hexavalent chromium analysis to only the ground water sample(s) collected from the Lorraine well, since this is where the cooling tower was reportedly located. However, hexavalent chromium is not an expensive analysis (\$25 - \$30), if we have to use a private laboratory; might be worthwhile to analyze all GW samples for hexavalent chromium during Mobilization 1.

Surface Water

- organic analytes: TCL VOCs, TAL SVOCs including SIM for PAHs
- inorganic analytes: metals total and dissolved, including mercury, cyanide, and hexavalent chromium (10%)
- Field parameters: pH, temperature, and conductivity will be measured in the field.
- Water Quality: Hardness, total dissolved solids, total suspended sediment (not solids 6-7-16 email), Alkalinity, organic carbon
- NO PCBs/Dioxins/Furans/Pesticides: these are not expected to be site COC. Risk is that we may have to resample if they are found to be a site COC.

SW question: can hexavalent chromium (10%) be eliminated based on same rationale as PCBs/Dioxins/Furans/Pesticides? If it is included, Houston can perform the analyses.

Since this is likely to occur during Mobilization 2, there may be no need to analyze for hexavalent chromium unless it's detected in GW or soil during Mobilization 1.

Sediment

- organic analytes: TCL VOCs, TAL SVOCs including SIM for PAHs
- inorganic analytes: metals total, including mercury, cyanide, and hexavalent chromium (10%)
- Additional: organic carbon, AVS/SEM., grain size (20%), pH
- NO PCBs/Dioxins/Furans/Pesticides: these are not expected to be site COC. Risk is that we may have to resample if they are found to be a site COC.

Sediment questions:

- can hexavalent chromium (10%) be eliminated based on same rationale as PCBs/Dioxins/Furans/Pesticides?

Since this is likely to occur during Mobilization 2, there may be no need to analyze for hexavalent chromium unless it's detected in GW or soil during Mobilization 1.

- pH: holding time is short. Can this be done in the field?

Can do field pH in water.

Soil

- organic analytes: TCL VOCs, TAL SVOCs including SIM for PAHs
- inorganic analytes: metals total, including mercury, cyanide, and hexavalent chromium (10 samples on Wilcox plus Samples around cooling pond located on Lorraine: this was revised based on planning conversations and projected number of borings in the process area – 5% did not provide but 1 or 2 samples)
- PCBs/Dioxins/Furans/Pesticides: 10 samples taken from Wilcox areas potentially suspected to have these present. (this was revised based on planning conversations and projected number of borings in the process area 5% did not provide but 1 or 2 samples)

Passive Gas

- VOCs and naphthalene

Katrina Higgins-Coltrain
Remedial Project Manager
US EPA Region 6
LA/OK/NM Section (6SF-RL)
1445 Ross Avenue
Dallas, Texas 75202
214-665-8143